

# Michigan Building Code

Incorporating the 2003 edition of  
the International Building Code

## 2003

**Michigan Department of Labor & Economic Growth  
Bureau of Construction Codes & Fire Safety**




building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.

## SECTION 106 CONSTRUCTION DOCUMENTS



**106.1 Submittal documents.** Construction documents, special inspection and structural programs and other data shall be submitted in 1 or more sets with each application for a permit. The construction documents shall be prepared by, or under the direct supervision of, a registered design professional when required by article 20 of 1980 PA 299, MCL 339.101 et seq. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

R 408.30405

**106.1.1 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

**106.1.1.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

**106.1.2 Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, as applicable in Section 101.2, and I-1, the construction documents shall designate the number

of occupants to be accommodated on every floor, and in all rooms and spaces.

**106.1.3 Exterior wall envelope.** Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

**106.2 Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

**106.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

**106.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

**106.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

**106.3.3 Phased approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have

**PANEL (PART OF A STRUCTURE).** See Section 1602.1.

**PANIC HARDWARE.** See Section 1002.1.

**PARTICLEBOARD.** See Section 2302.1.

**PEDESTAL.** See Section 1902.1.

**PENETRATION FIRESTOP.** See Section 702.1.

**PENTHOUSE.** See Section 1502.1.

**PERMIT.** An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

**PERSON.** An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

**PERSONAL CARE SERVICE.** See Section 310.2.

**[F] PHYSICAL HAZARD.** See Section 307.2.

**PIER FOUNDATIONS.** See Section 1808.1.

**Belled piers.** See Section 1808.1.

**PILE FOUNDATIONS.** See Section 1808.1.

**Auger uncased piles.** See Section 1808.1.

**Caisson piles.** See Section 1808.1.

**Concrete-filled steel pipe and tube piles.** See Section 1808.1.

**Driven uncased piles.** See Section 1808.1.

**Enlarged base piles.** See Section 1808.1.

**Piles.** See Section 1808.1.

**Steel-cased piles.** See Section 1808.1.

**PINRAIL.** See Section 410.2.

**PLAIN CONCRETE.** See Section 1902.1.

**PLAIN REINFORCEMENT.** See Section 1902.1.

**PLASTIC, APPROVED.** See Section 2602.1.

**PLASTIC GLAZING.** See Section 2602.1.

**PLASTIC HINGE.** See Section 2102.1.

**PLATFORM.** See Section 410.2.

**POSITIVE ROOF DRAINAGE.** See Section 1502.1.

**PRECAST CONCRETE.** See Section 1902.1.

**PRESERVATIVE-TREATED WOOD.** See Section 2302.1.

**PRESTRESSED CONCRETE.** See Section 1902.1.

**PRESTRESSED MASONRY.** See Section 2102.1.

**Prestressed masonry shear wall.** See Section 2102.1.

**Ordinary plain prestressed masonry shear wall.** See Section 2102.1.

**Special prestressed masonry shear wall.** See Section 2102.1.

**Special reinforced masonry shear wall.** See Section 2102.1.

**PRISM.** See Section 2102.1.

**PROJECTED AREA.** See Section 1913.2.2.

**PROSCENIUM WALL.** See Section 410.2.

**PUBLIC ENTRANCE.** See Section 1102.1.

**PUBLIC-USE AREAS.** See Section 1102.1.

**PUBLIC WAY.** See Section 1002.1.

**[F] PYROPHORIC.** See Section 307.2.

**[F] PYROTECHNIC COMPOSITION.** See Section 307.2.

**QUALITY ASSURANCE PLAN.** A written procedure complying with the requirements of Section 1705.

**RAMP.** See Section 1002.1.

**RAMP-ACCESS OPEN PARKING GARAGES.** See Section 406.3.2.

**[F] RECORD DRAWINGS.** See Section 902.1.

**REFERENCE RESISTANCE (D).** See Section 2302.1.

**REGISTERED DESIGN PROFESSIONAL.** "Registered design professional" means an individual who is licensed under article 20, 1980 PA 299, MCL 339.2001 et seq.

R 408.30415a

**REINFORCED CONCRETE.** See Section 1902.1.

**REINFORCED PLASTIC, GLASS FIBER.** See Section 2602.1.

**REINFORCEMENT.** See Section 1902.1.

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**REQUIRED STRENGTH.** See Sections 1602.1 and 2102.1.

**REROOFING.** See Section 1502.1.

**RESHORES.** See Section 1902.1.

**RESIDENTIAL AIRCRAFT HANGAR.** See Section 412.3.1.

**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** See Section 310.2.

**RESISTANCE FACTOR.** See Section 1602.1.

**RESTRICTED ENTRANCE.** See Section 1102.1.

**RETRACTABLE AWNING.** See Section 3105.2.

**ROOF ASSEMBLY.** See Section 1502.1.

**ROOF COVERING.** See Section 1502.1.

**ROOF COVERING SYSTEM.** See Section 1502.1.

**ROOF DECK.** See Section 1502.1.

**ROOF RECOVER.** See Section 1502.1.

**ROOF REPAIR.** See Section 1502.1.

**ROOF REPLACEMENT.** See Section 1502.1.

**ROOF VENTILATION.** See Section 1502.1.

**ROOFTOP STRUCTURE.** See Section 1502.1.

**RUBBLE MASONRY.** See Section 2102.1.

**Coursed rubble.** See Section 2102.1.

**Random rubble.** See Section 2102.1.

**Rough or ordinary rubble.** See Section 2102.1.

**RUNNING BOND.** See Section 2102.1.

**SCISSOR STAIR.** See Section 1002.1.

**SCUPPER.** See Section 1502.1.

The extension shall be requested in writing and justifiable cause demonstrated.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.

## SECTION 106 CONSTRUCTION DOCUMENTS

**106.1 Submittal documents.** Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this code.

**106.1.1 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

**106.1.1.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

**106.1.2 Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2, R-3, as applicable in Section 101.2, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

**106.1.3 Exterior wall envelope.** Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the ex-

terior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves or parapets, means of drainage, water-resistive membrane and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

**106.2 Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades and, as applicable, flood hazard areas, floodways, and design flood elevations; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

**106.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

**106.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or a duly authorized representative.

**106.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

**106.3.3 Phased approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and

**P-DELTA EFFECT.** See Section 1602.1.

**PANEL (PART OF A STRUCTURE).** See Section 1602.1.

**PANIC HARDWARE.** See Section 1002.1.

**PARTICLEBOARD.** See Section 2302.1.

**PEDESTAL.** See Section 1902.1.

**PENETRATION FIRESTOP.** See Section 702.1.

**PENTHOUSE.** See Section 1502.1.

**PERMIT.** An official document or certificate issued by the authority having jurisdiction which authorizes performance of a specified activity.

**PERSON.** An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

**PERSONAL CARE SERVICE.** See Section 310.2.

**[F] PHYSICAL HAZARD.** See Section 307.2.

**PIER FOUNDATIONS.** See Section 1808.1.

**Belled piers.** See Section 1808.1.

**PILE FOUNDATIONS.** See Section 1808.1.

**Auger uncased piles.** See Section 1808.1.

**Caisson piles.** See Section 1808.1.

**Concrete-filled steel pipe and tube piles.** See Section 1808.1.

**Driven uncased piles.** See Section 1808.1.

**Enlarged base piles.** See Section 1808.1.

**Piles.** See Section 1808.1.

**Steel-cased piles.** See Section 1808.1.

**PINRAIL.** See Section 410.2.

**PLAIN CONCRETE.** See Section 1902.1.

**PLAIN REINFORCEMENT.** See Section 1902.1.

**PLASTIC, APPROVED.** See Section 2602.1.

**PLASTIC GLAZING.** See Section 2602.1.

**PLASTIC HINGE.** See Section 2102.1.

**PLATFORM.** See Section 410.2.

**POSITIVE ROOF DRAINAGE.** See Section 1502.1.

**PRECAST CONCRETE.** See Section 1902.1.

**PRESERVATIVE-TREATED WOOD.** See Section 2302.1.

**PRESTRESSED CONCRETE.** See Section 1902.1.

**PRESTRESSED MASONRY.** See Section 2102.1.

**Prestressed masonry shear wall.** See Section 2102.1.

**Ordinary plain prestressed masonry shear wall.** See Section 2102.1.

**Special prestressed masonry shear wall.** See Section 2102.1.

**Special reinforced masonry shear wall.** See Section 2102.1.

**PRISM.** See Section 2102.1.

**PROJECTED AREA.** See Section 1913.2.2.

**PROSCENIUM WALL.** See Section 410.2.

**PUBLIC ENTRANCE.** See Section 1102.1.

**PUBLIC-USE AREAS.** See Section 1102.1.

**PUBLIC WAY.** See Section 1002.1.

**[F] PYROPHORIC.** See Section 307.2.

**[F] PYROTECHNIC COMPOSITION.** See Section 307.2.

**QUALITY ASSURANCE PLAN.** A written procedure complying with the requirements of Section 1705.

**RAMP.** See Section 1002.1.

**RAMP-ACCESS OPEN PARKING GARAGES.** See Section 406.3.2.

**[F] RECORD DRAWINGS.** See Section 902.1.

**REFERENCE RESISTANCE (D).** See Section 2302.1.

**REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

**REINFORCED CONCRETE.** See Section 1902.1.

**REINFORCED PLASTIC, GLASS FIBER.** See Section 2602.1.

**REINFORCEMENT.** See Section 1902.1.

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**REQUIRED STRENGTH.** See Sections 1602.1 and 2102.1.

**REROOFING.** See Section 1502.1.

**RESHORES.** See Section 1902.1.

**RESIDENTIAL AIRCRAFT HANGAR.** See Section 412.3.1.

**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** See Section 310.2.

**RESISTANCE FACTOR.** See Section 1602.1.

**RETRACTABLE AWNING.** See Section 3105.2.

**ROOF ASSEMBLY.** See Section 1502.1.

**ROOF COVERING.** See Section 1502.1.

**ROOF COVERING SYSTEM.** See Section 1502.1.

**ROOF DECK.** See Section 1502.1.

**ROOF RECOVER.** See Section 1502.1.

**ROOF REPAIR.** See Section 1502.1.

**ROOF REPLACEMENT.** See Section 1502.1.

**ROOF VENTILATION.** See Section 1502.1.

**ROOFTOP STRUCTURE.** See Section 1502.1.

**RUBBLE MASONRY.** See Section 2102.1.

**Coursed rubble.** See Section 2102.1.

**Random rubble.** See Section 2102.1.

**Rough or ordinary rubble.** See Section 2102.1.

**RUNNING BOND.** See Section 2102.1.

**SCISSOR STAIR.** See Section 1002.1.

**SCUPPER.** See Section 1502.1.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.

## SECTION 106 CONSTRUCTION DOCUMENTS

**106.1 Submittal documents.** Construction documents, special inspection and structural programs and other data shall be submitted in 1 or more sets with each application for a permit. The construction documents shall be prepared by, or under the direct supervision of, a registered design professional when required by article 20 of 1980 PA 299, MCL 339.101 et seq. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

R 408.30405

**106.1.1 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

**106.1.1.1 Fire protection system shop drawings.** Shop drawings for the fire protection system(s) shall be submitted to indicate conformance with this code and the construction documents and shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9.

**106.1.2 Means of egress.** The construction documents shall show in sufficient detail the location, construction, size and character of all portions of the means of egress in compliance with the provisions of this code. In other than occupancies in Groups R-2 and R-3 as applicable in Section 101.2 and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

**106.1.3 Exterior wall envelope.** Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this code. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets,

means of drainage, water-resistive membrane, and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system which was tested, where applicable, as well as the test procedure used.

**106.2 Site plan.** The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades and the proposed finished grades; and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The building official is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

**106.3 Examination of documents.** The building official shall examine or cause to be examined the accompanying construction documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances.

**106.3.1 Approval of construction documents.** When the building official issues a permit, the construction documents shall be approved, in writing or by stamp, as "Reviewed for Code Compliance." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the building official or his authorized representative.

**106.3.2 Previous approvals.** This code shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned.

**106.3.3 Phased approval.** The building official is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided that adequate information and detailed statements have been filed complying with pertinent requirements of this code. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the holder's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

**106.3.4 Design professional in responsible charge.**

**POSITIVE ROOF DRAINAGE.** See Section 1502.1.

**PRECAST CONCRETE.** See Section 1902.1.

**PRESERVATIVE-TREATED WOOD.** See Section 2302.1.

**PRESTRESSED CONCRETE.** See Section 1902.1.

**PRISM.** See Section 2102.1.

**PROSCENIUM WALL.** See Section 410.2.

**PUBLIC ENTRANCE.** See Section 1102.1.

**PUBLIC-USE AREAS.** See Section 1102.1.

**PUBLIC WAY.** See Section 1002.1.

**[F] PYROPHORIC.** See Section 307.2.

**[F] PYROTECHNIC COMPOSITION.** See Section 307.2.

**QUALITY ASSURANCE PLAN.** A written procedure complying with the requirements of Section 1705.

**RAMP.** See Section 1002.1.

**RAMP-ACCESS OPEN PARKING GARAGES.** See Section 406.3.2.

**[F] RECORD DRAWINGS.** See Section 902.1.

**REFERENCE RESISTANCE (*D*).** See Section 2302.1.

**REGISTERED DESIGN PROFESSIONAL.** "Registered design professional" means an individual who is licensed under article 20, 1980 PA 299, MCL 339.2001 et seq.

R 408.30415a

**REINFORCED CONCRETE.** See Section 1902.1.

**REINFORCED PLASTIC, GLASS FIBER.** See Section 2602.1.

**REINFORCEMENT.** See Section 1902.1.

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**REQUIRED STRENGTH.** See Sections 1602.1 and 2102.1.

**REROOFING.** See Section 1502.1.

**RESHORES.** See Section 1902.1.

**RESIDENTIAL AIRCRAFT HANGAR.** See Section 412.3.1.

**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** See Section 310.2.

**RESISTANCE FACTOR.** See Section 1602.1.

**REVIEWING STANDS.** See Section 1002.1.

**ROOF ASSEMBLY.** See Section 1502.1.

**ROOF COVERING.** See Section 1502.1.

**ROOF COVERING SYSTEM.** See Section 1502.1.

**ROOF DECK.** See Section 1502.1.

**ROOF RECOVER.** See Section 1502.1.

**ROOF REPAIR.** See Section 1502.1.

**ROOF REPLACEMENT.** See Section 1502.1.

**ROOF VENTILATION.** See Section 1502.1.

**ROOFTOP STRUCTURE.** See Section 1502.1.

**RUBBLE MASONRY.** See Section 2102.1.

**Coursed rubble.** See Section 2102.1.

**Random rubble.** See Section 2102.1.

**Rough or ordinary rubble.** See Section 2102.1.

**RUNNING BOND.** See Section 2102.1.

**SCUPPER.** See Section 1502.1.

**SELF-CLOSING.** See Section 702.1.

**SELF-SERVICE STORAGE FACILITY.** See Section 1102.1.

**[F] SERVICE CORRIDOR.** See Section 415.2.

**SERVICE ENTRANCE.** See Section 1102.1.

**SHAFT.** See Section 702.1.

**SHAFT ENCLOSURE.** See Section 702.1.

**SHALLOW ANCHORS.** See Section 1602.1.

**SHEAR PANEL.** See Section 1602.1.

**SHEAR WALL.** See Sections 1602.1 and 1613.1.

**Detailed plain masonry shear wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.1.3.

**Intermediate reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.4.

**Ordinary plain masonry shear wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.1.1.

**Ordinary reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.2.

**Special reinforced masonry shear wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.5.

**SHELL.** See Section 2102.1.

**SHORES.** See Section 1902.1.

**SHOTCRETE.** See Section 1914.1.

**SINGLE-PLY MEMBRANE.** See Section 1502.1.

**[F] SINGLE-STATION SMOKE ALARM.** See Section 902.1.

**SITE.** See Section 1102.1.

**SKYLIGHTS AND SLOPED GLAZING.** Glass or other transparent or translucent glazing material installed at a slope of 15 degrees (0.26 rad) or more from vertical. Glazing material in sky-lights, solariums, sun spaces, roofs and sloped walls are included in this definition.

**SLEEPING UNIT.** See Section 1102.1.

**[F] SMOKE ALARM.** See Section 902.1.



**105.2.3 Public service agencies.** A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

**105.3 Application for permit.** To obtain a permit, the applicant shall first file an application therefor in writing on a form furnished by the department of building safety for that purpose. Such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.
3. Indicate the use and occupancy for which the proposed work is intended.
4. Be accompanied by construction documents and other information as required in Section 106.3.
5. State the valuation of the proposed work.
6. Be signed by the applicant, or the applicant's authorized agent.
7. Give such other data and information as required by the building official.

**105.3.1 Action on application.** The building official shall examine or cause to be examined applications for permits and amendments thereto within a reasonable time after filing. If the application or the construction documents do not conform to the requirements of pertinent laws, the building official shall reject such application in writing, stating the reasons therefor. If the building official is satisfied that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, the building official shall issue a permit therefor as soon as practicable.

**105.3.2 Time limitation of application.** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.4 Validity of permit.** The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this code

or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the building official from requiring the correction of errors in the construction documents and other data. The building official is also authorized to prevent occupancy or use of a structure where in violation of this code or of any other ordinances of this jurisdiction.

**105.5 Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**105.6 Suspension or revocation.** The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

**105.7 Placement of permit.** The building permit or copy shall be kept on the site of the work until the completion of the project.

## SECTION 106 CONSTRUCTION DOCUMENTS

**106.1 Submittal documents.** Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

**Exception:** The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with this code.

**106.1.1 Information on construction documents.** Construction documents shall be dimensioned and drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the



**POSITIVE ROOF DRAINAGE.** See Section 1502.1.

**PRECAST CONCRETE.** See Section 1902.1.

**PRESERVATIVE-TREATED WOOD.** See Section 2302.1.

**PRESTRESSED CONCRETE.** See Section 1902.1.

**PRISM.** See Section 2102.1.

**PROSCENIUM WALL.** See Section 410.2.

**PUBLIC ENTRANCE.** See Section 1102.1.

**PUBLIC-USE AREAS.** See Section 1102.1.

**PUBLIC WAY.** See Section 1002.1.

**[F] PYROPHORIC.** See Section 307.2.

**[F] PYROTECHNIC COMPOSITION.** See Section 307.2.

**QUALITY ASSURANCE PLAN.** A written procedure complying with the requirements of Section 1705.

**RAMP.** See Section 1002.1.

**RAMP-ACCESS OPEN PARKING GARAGES.** See Section 406.3.2.

**[F] RECORD DRAWINGS.** See Section 902.1.

**REFERENCE RESISTANCE (*D*).** See Section 2302.1.



**REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

**REINFORCED CONCRETE.** See Section 1902.1.

**REINFORCED PLASTIC, GLASS FIBER.** See Section 2602.1.

**REINFORCEMENT.** See Section 1902.1.

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**REQUIRED STRENGTH.** See Sections 1602.1 and 2102.1.

**REROOFING.** See Section 1502.1.

**RESHORES.** See Section 1902.1.

**RESIDENTIAL AIRCRAFT HANGAR.** See Section 412.3.1.

**RESIDENTIAL CARE/ASSISTED LIVING FACILITIES.** See Section 310.2.

**RESISTANCE FACTOR.** See Section 1602.1.

**REVIEWING STANDS.** See Section 1002.1.

**ROOF ASSEMBLY.** See Section 1502.1.

**ROOF COVERING.** See Section 1502.1.

**ROOF COVERING SYSTEM.** See Section 1502.1.

**ROOF DECK.** See Section 1502.1.

**ROOF RECOVER.** See Section 1502.1.

**ROOF REPAIR.** See Section 1502.1.

**ROOF REPLACEMENT.** See Section 1502.1.

**ROOF VENTILATION.** See Section 1502.1.

**ROOFTOP STRUCTURE.** See Section 1502.1.

**RUBBLE MASONRY.** See Section 2102.1.

**Coursed rubble.** See Section 2102.1.

**Random rubble.** See Section 2102.1.

**Rough or ordinary rubble.** See Section 2102.1.

**RUNNING BOND.** See Section 2102.1.

**SALLYPORT.** See Section 408.1.1.

**SCUPPER.** See Section 1502.1.

**SELF-CLOSING.** See Section 702.1.

**SELF-SERVICE STORAGE FACILITY.** See Section 1102.1.

**[F] SERVICE CORRIDOR.** See Section 415.2.

**SERVICE ENTRANCE.** See Section 1102.1.

**SHAFT.** See Section 702.1.

**SHAFT ENCLOSURE.** See Section 702.1.

**SHALLOW ANCHORS.** See Section 1602.1.

**SHEAR PANEL.** See Section 1602.1.

**SHEAR WALL.** See Sections 1602.1 and 1613.1.

**Detailed Plain Masonry Shear Wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.1.3.

**Intermediate Reinforced Masonry Shear Wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.4.

**Ordinary Plain Masonry Shear Wall.** A masonry shear wall designed to resist lateral forces neglecting stresses in reinforcement, and designed in accordance with Section 2106.1.1.1.

**Ordinary Reinforced Masonry Shear Wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.2.

**Special Reinforced Masonry Shear Wall.** A masonry shear wall designed to resist lateral forces considering stresses in reinforcement, and designed in accordance with Section 2106.1.1.5.

**112.3.1 Fee schedule:** A fee for each plan examination, building permit and inspection shall be paid in accordance with the following schedule.

[JURISDICTION TO INSERT APPROPRIATE SCHEDULES.]

**112.4 Accounting:** The code official shall keep an accurate account of all fees collected; and such collected fees shall be deposited monthly in the jurisdiction treasury, or otherwise disposed of as required by law.

**112.5 Refunds:** In the case of a revocation of a permit or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed and any excess fee for the incompleting work shall be returned to the permit holder upon *written* request. All plan examination and permit processing fees and all penalties that have been imposed on the permit holder under the requirements of this code shall first be collected.

### SECTION 113.0 INSPECTION

**113.1 Preliminary inspection:** Before issuing a permit, the code official shall, if deemed necessary, examine or cause to be examined all buildings, structures and sites for which an application has been filed for a permit to construct, enlarge, alter, repair, remove, demolish or *change the occupancy* thereof.

**113.2 Required inspections:** After issuing a building permit, the code official shall conduct inspections from time to time during and upon completion of the work for which a permit has been issued. A record of all such examinations and inspections and of all violations of this code shall be maintained by the code official. The owner shall provide for *special inspections* in accordance with Section 1705.0.

**113.2.1 Approved inspection agencies:** The code official shall accept reports of *approved inspection agencies*, provided such agencies satisfy the requirements as to qualifications and reliability.

**113.2.2 Plant inspection:** Where required by the provisions of this code or by the *approved rules*, materials or assemblies shall be inspected at the point of manufacture or fabrication in accordance with Section 1703.3.

**113.3 Final inspection:** Upon completion of the building or structure, and before issuance of the certificate of occupancy required by Section 118.0, a final inspection shall be made. All violations of the approved *construction documents* and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

**113.4 Right of entry:** The code official shall have the authority to enter at any reasonable time any structure or premises for which a permit has been issued but has not received a certificate of occupancy in accordance with Section 118.0.

For all other structures or premises, when the code official has reasonable cause to believe that a code violation exists, the code official is authorized to enter the structure or premises at reasonable times to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the code official is authorized to pursue recourse as provided by law.

**113.5 Coordination of inspections:** Whenever in the enforcement of this code or another code or ordinance, the responsibility of more than one code official of the jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practicable so that the *owners* and occupants of the structure shall not be subjected to visits by numerous inspectors or multiple or conflicting orders. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

### SECTION 114.0 PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

**114.1 General:** Construction documents for new construction, alterations, repairs, expansion, additions or modifications for buildings or structures which involve the practice of architecture or engineering, as defined by the professional registration or licensing laws of the state, shall be prepared by a registered design professional consistent with the professional registration or licensing laws of the state in which the project is to be constructed. Construction documents shall include the name, address and license or registration number of the registered design professional and shall be signed, sealed and dated by the registered design professional in accordance with the professional registration or licensing laws, statutes, regulations or administration provisions of the state in which the project is to be constructed.

**114.2 Special inspections:** *Special inspections* shall be made in accordance with Section 1705.0.

**114.2.1 Building permit requirement:** This *special inspection* requirement shall be determined prior to the issuance of the building permit and shall be a requisite for the permit issuance as described in Section 1705.0.

**114.2.2 Fees and costs:** All fees and costs related to the performance of special professional services shall be borne by the owner.

### SECTION 115.0 WORKMANSHIP

**115.1 General:** All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code.

### SECTION 116.0 VIOLATIONS

**116.1 Unlawful acts:** It shall be unlawful for any person, firm or corporation to erect, construct, alter, extend, repair, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

**116.2 Notice of violation:** The code official shall serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a detail statement or a plan approved thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct

**Permit:** An official document or *certificate* issued by the authority having jurisdiction which authorizes performance of a specified activity (see Section 108.0).

**Person:** Includes a corporation, firm, partnership, association, organization and any other group acting as a unit as well as individuals. It shall also include an executor, administrator, trustee, receiver or other representative appointed according to law. Whenever the word "person" is used in any section of this code prescribing a penalty or fine, as to partnerships or associations, the word shall include the partners or members thereof, and as to corporations, shall include the officer, agents or members thereof who are responsible for any violation of such section.

**Physical hazard:** See Section 307.2.

**Physically disabled person:** See Section 1102.0.

**Plastic**

**Light-diffusing system:** See Section 2602.0.

**Plastic glazing:** See Section 2602.0.

**Plastic roof panels:** See Section 2602.0.

**Plastic wall panels:** See Section 2602.0.

**Reinforced plastic, glass fiber:** See Section 2602.0.

**Thermoplastic material:** See Section 2602.0.

**Thermosetting material:** See Section 2602.0.

**Platform:** See Section 412.2.

**Plenum:** See Section 2807.1.

**Pools, swimming, hot tubs and spas**

**Above-ground/on-ground pool:** See Section 421.2.

**Barrier:** See Section 421.2.

**Hot tub:** See Section 421.2.

**In-ground pool:** See Section 421.2.

**Power safety cover:** See Section 421.2.

**Private swimming pool:** See Section 421.2.

**Private swimming pool, indoor:** See Section 421.2.

**Private swimming pool, outdoor:** See Section 421.2.

**Public swimming pool:** See Section 421.2.

**Spa:** See Section 421.2.

**Preaction system:** See Section 902.0.

**Premises:** A lot, plot or parcel of land, including any structure thereon.

**Preservative treatment (treated material):** See Section 2302.0.

**Proscenium wall:** See Section 412.2.

**Protected construction:** See Section 702.0.

**Public way:** See Section 1002.0.

**Pyrophoric:** See Section 307.2.

**Pyrotechnic composition:** See Section 307.2.

**Rack systems:** See Section 422.2.

**Radioactive material:** See Section 307.2.

**Registered design professional:** An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the

professional registration laws of the state in which the project is to be constructed.

**Repair:** The reconstruction or renewal of any part of an existing structure for the purpose of its maintenance (see Section 107.1.1).

**Required:** Shall be construed to be mandatory by provisions of this code.

**Residential care facility:** See Section 310.2.

**Resilient stable-mounting system:** See Section 1610.2.

**Restraining device:** See Section 1610.2.

**Elastic:** See Section 1610.2.

**Fixed:** See Section 1610.2.

**Seismic activated:** See Section 1610.2.

**Roof:** See Section 1502.0.

**Roof covering:** See Section 1502.0.

**Roof structure:** See Section 1502.0.

**Rubble masonry:** See Section 2102.0.

**Coursed rubble:** See Section 2102.0.

**Random rubble:** See Section 2102.0.

**Rough or ordinary rubble:** See Section 2102.0.

**Running bond:** See Section 2102.0.

**Sallyport:** See Section 410.3.6.

**Seismic-resisting system:** See Section 1610.2.

**Self-closing:** See Section 702.0.

**Sensitizer:** See Section 307.2.

**Service passage, HPM:** See Section 416.2.

**Shaft:** See Section 702.0.

**Shall:** The term, where used in this code, shall be construed as mandatory.

**Shear wall:** See Section 1610.2.

**Shelf storage:** See Section 422.2.

**Sign:** See Section 3102.2.

**Closed sign:** See Section 3102.2.

**Ground sign:** See Section 3102.2.

**Marquee sign:** See Section 3102.2.

**Open sign:** See Section 3102.2.

**Portable sign:** See Section 3102.2.

**Projecting sign:** See Section 3102.2.

**Roof sign:** See Section 3102.2.

**Temporary sign:** See Section 3102.2.

**Wall sign:** See Section 3102.2.

**Single membrane penetration:** See Section 702.0.

**Site:** See Section 1102.0.

**Slidescape:** See Section 1002.0.

**Smoke barrier:** See Section 702.0.

**Smoke compartment:** See Section 702.0.

**Smoke detector, multiple station:** See Section 902.0.



12

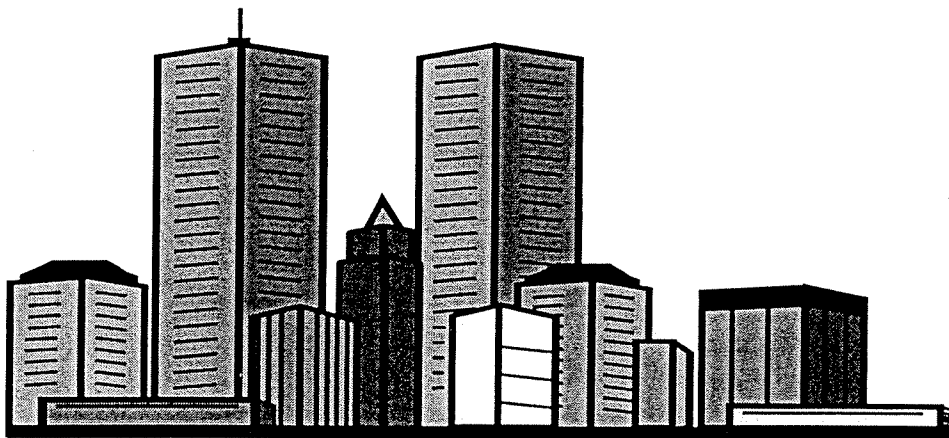
RECEIVED  
NOV 18 1998  
TISEO ARCHITECTS, INC.  
\_\_\_\_\_a.m. \_\_\_\_\_p.m.

Department of Consumer and Industry Services

# BUILDING CODE RULES

## Parts 1, 2, 3 & 4

INCORPORATING THE **1996** EDITION OF  
THE BOCA NATIONAL BUILDING CODE  
(Includes Barrier Free Design Requirements)



BUREAU OF CONSTRUCTION CODES  
P.O. BOX 30254  
LANSING, MICHIGAN 48909

## **SECTION 112.0 - FEES**

**112.1. General:** The fees prescribed by section 22 of the act shall be paid to the enforcing agency or other authorized agency of the jurisdiction before a permit to begin work for new construction, alteration, removal, demolition, or other building operation may be issued. In addition, an amendment to a permit necessitating an additional fee shall not be approved until the additional fee has been paid.

R 408.30408

## **SECTION 113.0 - INSPECTION**

**113.2. Required inspections:** (1) After issuing a building permit, the building official shall conduct such inspections from time to time during and upon completion of the work for which a permit has been issued. A record of all such examinations and inspections and of all violations of the code shall be maintained by the building official. The owner shall provide for special inspections in accordance with section 1705.0 of the code. It shall be the duty of the permit holder or his or her agent to notify the building official when any portion of the work is ready for inspection. Local enforcing agencies shall establish and notify the permit holder, at the time of issuance of the permit, of reasonable time parameters for providing inspection services. Work may not be concealed until it is inspected and approved by the building official.

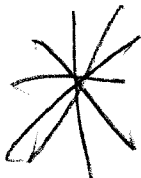
(2) At a minimum, all of the following inspections shall be made:

- (a) A foundation inspection, which shall be made after site preparation for the foundation system.
- (b) A rough or framing inspection, which is commonly made after the roof, all framing, firestopping, and bracing are in place and before the installation of insulation.
- (c) A final inspection which shall be made in accordance with the provisions of section 113.3 of the code.
- (d) In addition to the specific inspections of this section, the building official may make or require other inspections, in accordance with the provisions of section 12 of the act, to ascertain compliance with the code or other regulations administered by the building official. Notification of other required inspections shall be given to the permit holder at the time the permit is issued.

R408.30409

## **SECTION 114.0 - PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES**

**114.1. General:** The construction documents for new construction, alteration, repair, expansion, addition, or modification for buildings or structures shall be prepared by or under the direct supervision of an architect or professional engineer licensed



14

under Act No. 299 of the Public Acts of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws, and known as the occupational code. The construction documents shall include the name and address of the architect or professional engineer and shall bear that architect's or professional engineer's original signature, seal, and date. Exceptions are as follows:

- (a) Alterations determined by the building official to be of a minor nature.
- (b) This section shall not apply to work completed by a governmental subdivision or state agency costing less than \$15,000.00 or to a building of use group R-3 or R-4 containing not more than 3,500 square feet of calculated floor area.

R 408.30405

### **SECTION 116.0 - VIOLATIONS**

**116.1. Unlawful acts:** A person, firm, or corporation may not erect, construct, alter, extend, repair, remove, demolish, use, or occupy any building, structure, or equipment regulated by the code, or cause same to be done, contrary to, in conflict with, or in violation of, any of the provisions of the code or the act.

**116.4. Violation penalties:** Prohibited acts and penalties shall be in compliance with section 23 of the act.

R 408.30410

### **SECTION 117.0 - STOP-WORK ORDER**

**117.1. Notice to owner:** Upon notice from the building official that work on any building or structure is being prosecuted contrary to the provisions of the code or in an unsafe and dangerous manner, the work shall be stopped in accordance with section 12 of the act.

**117.2. Unlawful continuance:** Any person who continues any work in or about the structure after having been served with a stop-work order, except for work that the person is directed to perform to remove a violation or unsafe conditions, is subject to the penalty provisions specified in section 23 of the act.

R 408.30411

### **SECTION 118.0 - CERTIFICATE OF OCCUPANCY**

**118.1. General:** A certificate of occupancy which is issued by the building official in accordance with section 13 of the act and which indicates completion of the work for

**112.3.1 Fee schedule:** A fee for each plan examination, building permit and inspection shall be paid in accordance with the following schedule.

[JURISDICTION TO INSERT APPROPRIATE SCHEDULES.]

**112.4 Accounting:** The code official shall keep an accurate account of all fees collected; and such collected fees shall be deposited monthly in the jurisdiction treasury, or otherwise disposed of as required by law.

**112.5 Refunds:** In the case of a revocation of a permit or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed and any excess fee for the incompleted work shall be returned to the permit holder upon *written* request. All plan examination and permit processing fees and all penalties that have been imposed on the permit holder under the requirements of this code shall first be collected.

### SECTION 113.0 INSPECTION

**113.1 Preliminary inspection:** Before issuing a permit, the code official shall, if deemed necessary, examine or cause to be examined all buildings, structures and sites for which an application has been filed for a permit to construct, enlarge, *alter*, repair, remove, demolish or *change the occupancy* thereof.

**113.2 Required inspections:** After issuing a building permit, the code official shall conduct inspections from time to time during and upon completion of the work for which a permit has been issued. A record of all such examinations and inspections and of all violations of this code shall be maintained by the code official. The *owner* shall provide for *special inspections* in accordance with Section 1705.0.

**113.2.1 Approved inspection agencies:** The code official shall accept reports of *approved inspection agencies*, provided such agencies satisfy the requirements as to qualifications and reliability.

**113.2.2 Plant inspection:** Where required by the provisions of this code or by the *approved rules*, materials or assemblies shall be inspected at the point of manufacture or fabrication in accordance with Section 1703.3.

**113.3 Final inspection:** Upon completion of the building or structure, and before issuance of the certificate of occupancy required by Section 118.0, a final inspection shall be made. All violations of the approved *construction documents* and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

**113.4 Right of entry:** The code official shall have the authority to enter at any reasonable time any structure or premises for which a permit has been issued but has not received a certificate of occupancy in accordance with Section 118.0.

For all other structures or premises, when the code official has reasonable cause to believe that a code violation exists, the code official is authorized to enter the structure or premises at reasonable times to inspect subject to constitutional restrictions on unreasonable searches and seizures. If entry is refused or not obtained, the code official is authorized to pursue recourse as provided by law.

**113.5 Coordination of inspections:** Whenever in the enforcement of this code or another code or ordinance, the responsibility of more than one code official of the jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practicable so that the *owners* and occupants of the structure shall not be subjected to visits by numerous inspectors or multiple or conflicting orders. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

### SECTION 114.0 PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

**114.1 General:** The *construction documents* for new construction, *alteration*, repairs, expansion, *addition* or modification for buildings or structures shall be prepared by a *registered design professional*. All *construction documents* required for a building permit application shall be prepared by a *registered design professional* consistent with the professional registration laws of the state in which the project is to be constructed. The *construction documents* shall include the name and address of the *registered design professional* and shall be signed, sealed and dated by the *registered design professional* in accordance with the professional registration laws of the state in which the project is to be constructed.

**114.2 Special inspections:** *Special inspections* shall be made in accordance with Section 1705.0.

**114.2.1 Building permit requirement:** This *special inspection* requirement shall be determined prior to the issuance of the building permit and shall be a requisite for the permit issuance as described in Section 1705.0.

**114.2.2 Fees and costs:** All fees and costs related to the performance of special professional services shall be borne by the *owner*.

### SECTION 115.0 WORKMANSHIP

**115.1 General:** All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code.

### SECTION 116.0 VIOLATIONS

**116.1 Unlawful acts:** It shall be unlawful for any person, firm or corporation to erect, construct, *alter*, extend, repair, remove, demolish or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

**116.2 Notice of violation:** The code official shall serve a notice of violation or order on the person responsible for the erection, construction, *alteration*, extension, repair, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a detail statement or a plan approved thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

**Power safety cover:** See Section 421.2.  
**Private swimming pool:** See Section 421.2.  
**Private swimming pool, indoor:** See Section 421.2.  
**Private swimming pool, outdoor:** See Section 421.2.  
**Public swimming pool:** See Section 421.2.  
**Spa:** See Section 421.2.

\* **Preaction system:** See Section 902.0.

**Premises:** A lot, plot or parcel of land, including any structure thereon.

**Preservative treatment (treated material):** See Section 2302.0.

**Proscenium wall:** See Section 412.2.

**Protected construction:** See Section 702.0.

**Public way:** See Section 1002.0.

**Pyrophoric:** See Section 307.2.

**Radioactive material:** See Section 307.2.

**Registered design professional:** An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

**Repair:** The reconstruction or renewal of any part of an existing structure for the purpose of its maintenance (see Section 107.1.1).

**Required:** Shall be construed to be mandatory by provisions of this code.

**Resilient stable-mounting system:** See Section 1610.2.

**Restraining device:** See Section 1610.2.  
**Elastic:** See Section 1610.2.  
**Fixed:** See Section 1610.2.  
**Seismic activated:** See Section 1610.2.

**Roof:** See Section 1502.0.

**Roof covering:** See Section 1502.0.

**Roof structure:** See Section 1502.0.

**Rubble masonry:** See Section 2102.0.  
**Coursed rubble:** See Section 2102.0.  
**Random rubble:** See Section 2102.0.  
**Rough or ordinary rubble:** See Section 2102.0.

**Running bond:** See Section 2102.0.

**Sallyport:** See Section 410.3.6.

**Seismic-resisting system:** See Section 1610.2.

**Self-closing:** See Section 702.0.

**Sensitizer:** See Section 307.2.

**Service passage, HPM:** See Section 416.2.

**Shaft:** See Section 702.0.

**Shall:** The term, where used in this code, shall be construed as mandatory.

**Shear wall:** See Section 1610.2.

**Sign:** See Section 3102.2.  
**Closed sign:** See Section 3102.2.  
**Ground sign:** See Section 3102.2.  
**Marquee sign:** See Section 3102.2.  
**Open sign:** See Section 3102.2.  
**Portable sign:** See Section 3102.2.  
**Projecting sign:** See Section 3102.2.  
**Roof sign:** See Section 3102.2.  
**Temporary sign:** See Section 3102.2.  
**Wall sign:** See Section 3102.2.

**Single membrane penetration:** See Section 702.0.

**Site:** See Section 1102.0.

**Slidescape:** See Section 1002.0.

**Smoke barrier:** See Section 702.0.

**Smoke compartment:** See Section 702.0.

**Smoke detector, multiple station:** See Section 902.0.

**Smoke detector, single station:** See Section 902.0.

**Smokeproof enclosure:** See Section 1002.0.

**Smoke-protected assembly seating:** See Section 1013.2.

**Special amusement building:** See Section 413.2.

**Splice:** See Section 702.0.

**Sprinkler:** See Section 902.0.

**Sprinkler system, automatic:** See Section 902.0.

**Sprinkler system, limited area:** See Section 902.0.

**Stack bond:** See Section 2102.0.

**Stage:** See Section 412.2.

**Stairway:** See Section 1002.0.

**Standby power system:** See Section 2707.1.

**Standpipe system:** See Section 902.0.

**Steel construction, cold-formed:** See Section 2202.0.

**Steel joist:** See Section 2202.0.

**Steel member, structural:** See Section 2202.0.

**Stone masonry:** See Section 2102.0.  
**Ashlar stone masonry:** See Section 2102.0.  
**Rubble stone masonry:** See Section 2102.0.

**Storage room, HPM, separate inside:** See Section 416.2.  
**HPM cutoff room:** See Section 416.2.  
**HPM inside room:** See Section 416.2.

**Story:** See Section 502.0.

**Story above grade:** See Section 502.0.

**Story drift ratio:** See Section 1610.2.

**Story shear:** See Section 1610.2.

**Street:** A public thoroughfare (such as a street, avenue or boulevard) which has been dedicated for public use.

**Structure:** That which is built or constructed or a portion thereof.



17

MICHIGAN DEPARTMENT OF  
**LABOR**  
**BUILDING**

CODE RULES

INCORPORATING THE *1993* EDITION OF  
THE BOCA NATIONAL BUILDING CODE

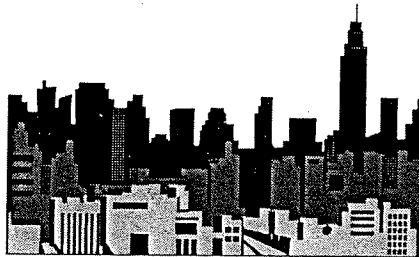
Part 1 - Administration and Enforcement

Part 2 - Permits, Inspections & Fees

Part 3 - Appeal Boards and Hearings

Part 4 - Building Code Rules

(Includes Barrier Free Design and  
Michigan Energy Code Requirements)



MICHIGAN DEPARTMENT OF LABOR  
CONSTRUCTION CODE COMMISSION

BUREAU OF CONSTRUCTION CODES

7150 HARRIS DRIVE, P. O. BOX 30254

LANSING, MICHIGAN 48909

(517) 322-1705

18

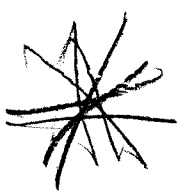
framing, firestopping, and bracing are in place and before the installation of insulation.

(c) A final inspection which shall be made in accordance with the provisions of section 113.3 of the code.


(d) In addition to the specific inspections of this section, the building official may make or require other inspections, in accordance with the provisions of section 12 of the act, to ascertain compliance with the code or other regulations administered by the building official. Notification of other required inspections shall be given to the permit holder at the time the permit is issued.

R 408.30409

### **SECTION 114.0 - PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES.**



**114.1. General:** (AMENDED) The construction documents for new construction, alteration, repair, expansion, addition, or modification for buildings or structures shall be prepared by or under the direct supervision of an architect or professional engineer licensed pursuant to Act No. 299 of the Public Acts of 1980, as amended, being §339.101 et seq. of the Michigan Compiled Laws, and known as the occupational code. The construction documents shall include the name and address of the architect or professional engineer and shall bear that architect's or professional engineer's original signature, seal, and date. Exceptions are as follows:



(a) Alterations determined by the building official to be of a minor nature.

(b) This section shall not apply to work completed by a governmental subdivision or state agency costing less than \$15,000.00 or to a building of use group R-3 or R-4 containing not more than 3,500 square feet of calculated floor area.

R 408.30405

### **SECTION 116.0 - VIOLATIONS**

**116.1. Unlawful acts:** (AMENDED) A person, firm, or corporation may not erect, construct, alter, extend, repair, remove, demolish, use, or occupy any building, structure, or equipment regulated by the code, or cause the same to be done, contrary to, in conflict with, or in violation of, any of the provisions of the code or the act.

**116.4. Violation penalties:** (AMENDED) Prohibited acts and penalties shall be in compliance with section 23 of the act.

R 408.30410

**112.3.1 Fee schedule:** A fee for each plan examination, building permit and inspection shall be paid in accordance with the following schedule.

[JURISDICTION TO INSERT APPROPRIATE SCHEDULES.]

**112.4 Accounting:** The code official shall keep an accurate account of all fees collected; and such collected fees shall be deposited monthly in the jurisdiction treasury, or otherwise disposed of as required by law.

**112.5 Refunds:** In the case of a revocation of a permit or abandonment or discontinuance of a building project, the portion of the work actually completed shall be computed and any excess fee for the incompleting work shall be returned to the permit holder upon *written* request. All plan examination and permit processing fees and all penalties that have been imposed on the permit holder under the requirements of this code shall first be collected.

### SECTION 113.0 INSPECTION

**113.1 Preliminary inspection:** Before issuing a permit, the code official shall, if deemed necessary, examine or cause to be examined all buildings, structures and sites for which an application has been filed for a permit to construct, enlarge, *alter*, repair, remove, demolish or *change the occupancy* thereof.

**113.2 Required inspections:** After issuing a building permit, the code official shall conduct inspections from time to time during and upon completion of the work for which a permit has been issued. A record of all such examinations and inspections and of all violations of this code shall be maintained by the code official. The owner shall provide for *special inspections* in accordance with Section 1705.0.

**113.2.1 Approved inspection agencies:** The code official shall accept reports of *approved inspection agencies* provided such agencies satisfy the requirements as to qualifications and reliability.

**113.2.2 Plant inspection:** Where required by the provisions of this code or by the *approved rules*, materials or assemblies shall be inspected at the point of manufacture or fabrication in accordance with Section 1703.3.

**113.3 Final inspection:** Upon completion of the building or structure, and before issuance of the certificate of occupancy required by Section 118.0, a final inspection shall be made. All violations of the approved *construction documents* and permit shall be noted and the holder of the permit shall be notified of the discrepancies.

**113.4 Right of entry:** The code official shall have the authority to enter at any reasonable time any structure or premises for which a permit has been issued but has not received a certificate of occupancy in accordance with Section 118.0.

For all other structures or premises, when the code official has reasonable cause to believe that a code violation exists, the code official is authorized to enter the structure or premises at reasonable times to inspect. Prior to entering into a space not otherwise open to the general public, the code official shall make a reasonable effort to locate the owner or other person having charge or control of the structure or premises, present proper identification and request entry. If requested entry is refused or

not obtained, the code official shall pursue recourse as provided by law.

**113.5 Coordination of inspections:** Whenever in the enforcement of this code or another code or ordinance, the responsibility of more than one code official of the jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practicable so that the owners and occupants of the structure shall not be subjected to visits by numerous inspectors or multiple or conflicting orders. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

### SECTION 114.0 PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

**114.1 General:** The *construction documents* for new construction, *alteration*, repairs, expansion, *addition* or modification for buildings or structures shall be prepared by a *registered design professional*. All *construction documents* required for a building permit application shall be prepared by a *registered design professional* consistent with the professional registration laws of the state in which the project is to be constructed. The *construction documents* shall include the name and address of the *registered design professional* and shall be signed, sealed and dated by the *registered design professional* in accordance with the professional registration laws of the state in which the project is to be constructed.

**114.2 Special inspections:** *Special inspections* shall be made in accordance with Section 1705.0.

**114.2.1 Building permit requirement:** This *special inspection* requirement shall be determined prior to the issuance of the building permit and shall be a requisite for the permit issuance as described in Section 1705.0.

**114.2.2 Fees and costs:** All fees and costs related to the performance of special professional services shall be borne by the owner.

### SECTION 115.0 WORKMANSHIP

**115.1 General:** All work shall be conducted, installed and completed in a workmanlike and acceptable manner so as to secure the results intended by this code.

### SECTION 116.0 VIOLATIONS

**116.1 Unlawful acts:** It shall be unlawful for any person, firm or corporation to erect, construct, *alter*, extend, repair, remove, demolish or occupy any building or structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

**116.2 Notice of violation:** The code official shall serve a notice of violation or order on the person responsible for the erection, construction, *alteration*, extension, repair, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a detail statement or a plan approved thereunder, or in violation of a permit or certificate issued under the provisions of this code. Such order shall

**Occupied:** As applied to a building, shall be construed as though followed by the words "or intended, arranged or designed to be occupied."

**Open system:** See Section 307.2.

**Organic peroxide:** See Section 307.2.

**Oriel window:** See Section 3203.2.

**Owner:** Any person, agent, firm or corporation having a legal or equitable interest in the property.

**Oxidizer:** See Section 307.2.

**P-Delta effect:** See Section 1612.2.

**Panel (part of a structure):** See Section 1602.0.

**Particleboard:** See Section 2302.0.

**Penthouse:** See Section 1502.0.

**Permit:** An official document or *certificate* issued by the authority having jurisdiction which authorizes performance of a specified activity (see Section 108.0).

**Person:** Includes a corporation, firm, partnership, association, organization and any other group acting as a unit as well as individuals. It shall also include an executor, administrator, trustee, receiver or other representative appointed according to law. Whenever the word "person" is used in any section of this code prescribing a penalty or fine, as to partnerships or associations, the word shall include the partners or members thereof, and as to corporations, shall include the officer, agents or members thereof who are responsible for any violation of such section.

**Physical hazard:** See Section 307.2.

**Physically disabled person:** See Section 1102.0.

#### **Plastic**

**Light-diffusing system:** See Section 2602.0.

**Plastic glazing:** See Section 2602.0.

**Plastic roof panels:** See Section 2602.0.

**Plastic wall panels:** See Section 2602.0.

**Reinforced plastic, glass fiber:** See Section 2602.0.

**Thermoplastic material:** See Section 2602.0.

**Thermosetting material:** See Section 2602.0.

**Platform:** See Section 412.2.

#### **Pools, swimming, hot tubs and spas**

**Above-ground/on-ground pool:** See Section 421.2.

**Barrier:** See Section 421.2.

**Hot tub:** See Section 421.2.

**In-ground pool:** See Section 421.2.

**Private swimming pool:** See Section 421.2.

**Private swimming pool, indoor:** See Section 421.2.

**Private swimming pool, outdoor:** See Section 421.2.

**Public swimming pool:** See Section 421.2.

**Spa:** See Section 421.2.

**Positive heat supply:** See Section 1302.0.

**Preaction system:** See Section 902.0.

**Premises:** A lot, plot or parcel of land, including any structure thereon.

**Preservative treatment (treated material):** See Section 2302.0.

**Production greenhouse:** See Section 1610.2.

**Protected construction:** See Section 702.0.

**Public way:** See Section 1002.0.

**Pyrophoric:** See Section 307.2.

**Radioactive material:** See Section 307.2.

**Registered design professional:** An architect or engineer, registered or licensed to practice professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the project is to be constructed.

**Repair:** The reconstruction or renewal of any part of an existing structure for the purpose of its maintenance (see Section 107.1.1).

**Required:** Shall be construed to be mandatory by provisions of this code.

**Resilient stable-mounting system:** See Section 1612.2.

**Restraining device:** See Section 1612.2.

**Elastic:** See Section 1612.2.

**Fixed:** See Section 1612.2.

**Seismic activated:** See Section 1612.2.

**Retail greenhouse:** See Section 1610.2.

**Roof:** See Section 1502.0.

**Roof covering:** See Section 1502.0.

**Roof structure:** See Section 1502.0.

**Rubble masonry:** See Section 2102.0.

**Coursed rubble:** See Section 2102.0.

**Random rubble:** See Section 2102.0.

**Rough or ordinary rubble:** See Section 2102.0.

**Running bond:** See Section 2102.0.

**Seismic-resisting system:** See Section 1612.2.

**Self-closing:** See Section 702.0.

**Sensitizer:** See Section 307.2.

**Service passage, HPM:** See Section 416.2.

**Shaft:** See Section 702.0.

**Shall:** The term, where used in this code, shall be construed as mandatory.

**Shear wall:** See Section 1612.2.

**Sign:** See Section 3102.2.

**Closed sign:** See Section 3102.2.

**Ground sign:** See Section 3102.2.

**Marquee sign:** See Section 3102.2.

**Open sign:** See Section 3102.2.

**Portable sign:** See Section 3102.2.

**Projecting sign:** See Section 3102.2.

**Roof sign:** See Section 3102.2.

**Temporary sign:** See Section 3102.2.

**Wall sign:** See Section 3102.2.

as meters and regulators, have been removed or sealed and plugged in a safe manner.

**105.2 Notice to adjoining owners:** Only when *written notice* has been given by the applicant to the owners of adjoining *lots* and to the owners of wired or other facilities, of which the temporary removal is necessitated by the proposed work, shall a permit be granted for the removal of a building or structure.

**105.3 Lot regulation:** Whenever a structure is demolished or removed, the premises shall be maintained free from all unsafe or hazardous conditions by the proper regulation of the *lot*, restoration of established grades and the erection of the necessary retaining *walls* and fences in accordance with the provisions of Article 30.

## SECTION 106.0 MOVED STRUCTURES

**106.1 Compliance:** Buildings and structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings and structures and shall not be used or occupied in whole or in part until the *certificate of use and occupancy* has been issued by the code official.

## SECTION 107.0 APPROVAL

**107.1 Approved materials and equipment:** All materials, equipment and devices approved for use by the code official shall be constructed and installed in accordance with such approval.

**107.2 Modifications:** When there are practical difficulties involved in carrying out structural or mechanical provisions of this code, the code official shall have the right to vary or modify such provisions upon application of the owner or the owner's representative, provided that the spirit and intent of the law is observed and that the public health, safety and welfare is assured.

**107.2.1 Records:** The application for modification and the final decision of the code official shall be in *writing* and shall be officially recorded with the application for the permit in the permanent records of the department of building inspection.

**107.3 Used materials and equipment:** Used materials, equipment and devices shall not be reused unless they have been reconditioned, tested and placed in good and proper working condition and approved for use by the code official.

**107.4 Alternative materials and equipment:** The provisions of this code are not intended to prevent the use of any material or method of construction not specifically prescribed by this code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved when the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

## SECTION 108.0 PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

**108.1 General:** All design for new construction work, *alteration*, repair, expansion, *addition* or modification work involving the practice of professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the construction is to be undertaken, shall be prepared by registered professional architects or engineers as certified by such state. All plans, computations and specifications required for a building permit application for such work shall be prepared by or under the direct supervision of a registered architect or engineer and bear that architect's or engineer's signature and seal in accordance with the state's statutes and regulations governing the professional registration and certification of architects or engineers.

**108.2 Special inspections:** *Special inspections* shall be made in accordance with Section 1308.0.

**108.2.1 Building permit requirement:** This *special inspection* requirement shall be determined prior to the issuance of the building permit and shall be a requisite for the permit issuance as described in Section 1308.0.

**108.2.2 Fees and costs:** All fees and costs related to the performance of special professional services shall be borne by the owner.

## SECTION 109.0 DEPARTMENT OF BUILDING INSPECTION

**109.1 Code official:** The department of building inspection is hereby created and the executive official in charge thereof shall be known as the code official.

**109.2 Appointment:** The code official shall be appointed by the chief appointing authority of the jurisdiction; and the code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

**109.3 Organization:** The code official shall appoint such number of officers, technical assistants, inspectors and other employees as shall be necessary for the administration of this code and as authorized by the appointing authority.

**109.4 Deputy:** The code official is authorized to designate an employee as deputy who shall exercise all the powers of the code official during the temporary absence or disability of the code official.

**109.5 Restriction of employees:** An official or employee connected with the department of building inspection, except one whose only connection is that of a member of the board of survey or of the board of appeals established under the provisions of Sections 123.0 and 124.0, shall not be engaged in or directly or indirectly connected with the furnishing of labor, materials or appliances for the construction, *alteration* or maintenance of a building, or the preparation of plans or specifications thereof, unless that person is the owner of the building; nor shall such officer or employee engage in any work which conflicts with official duties or with the interests of the department.

and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

**105.2 Notice to adjoining owners:** Only when written notice has been given by the applicant to the owners of adjoining lots and to the owners of wired or other facilities, of which the temporary removal is necessitated by the proposed work, shall a permit be granted for the removal of a building or structure.

**105.3 Lot regulation:** Whenever a structure is demolished or removed, the premises shall be maintained free from all unsafe or hazardous conditions by the proper regulation of the lot, restoration of established grades and the erection of the necessary retaining walls and fences in accordance with the provisions of Article 30.

#### SECTION 106.0 MOVED STRUCTURES

**106.1 Compliance:** Buildings and structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings and structures and shall not be used or occupied in whole or in part until the certificate of use and occupancy shall have been issued by the code official.

#### SECTION 107.0 APPROVAL

**107.1 Approved materials and equipment:** All materials, equipment and devices approved for use by the code official shall be constructed and installed in accordance with such approval.

**107.2 Modifications:** When there are practical difficulties involved in carrying out structural or mechanical provisions of this code, the code official is permitted to vary or modify such provision upon application of the owner or the owner's representative, provided that the spirit and intent of the law shall be observed and public welfare and safety be assured.

**107.2.1 Records:** The application for modification and the final decision of the code official shall be in writing and shall be officially recorded with the application for the permit in the permanent records of the department of building inspection.

**107.3 Used materials and equipment:** Used materials, equipment and devices shall not be re-used unless they have been reconditioned, tested and placed in good and proper working condition and approved for use by the code official.

**107.4 Alternative materials and equipment:** The provisions of this code are not intended to prevent the use of any material or method of construction not specifically prescribed by this code, provided any such alternative has been approved. An alternative material or method of construction shall be approved when the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this code in quality, strength, effectiveness, fire resistance, durability and safety.

**107.4.1 Research and investigations:** The code official shall require that sufficient technical data be submitted to substantiate the proposed use of any material or assembly, and if it is determined that the evidence submitted is satisfactory proof of performance for the use intended, the code official shall approve its use subject to the requirements of this code. The costs of all tests, reports and investigations required under these provisions shall be paid by the applicant.

**107.4.2 Research reports:** Supporting data, when required by the code official to assist in the approval of all materials or assemblies not specifically provided for in this code, shall consist of duly authenticated research reports from approved sources.

#### SECTION 108.0 PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

**108.1 General:** All design for new construction work, alteration, repair, expansion, addition or modification work involving the practice of professional architecture or engineering, as defined by the statutory requirements of the professional registration laws of the state in which the construction is to be undertaken, shall be prepared by registered professional architects or engineers as certified by such state. All plans, computations and specifications required for a building permit application for such work shall be prepared by or under the direct supervision of a registered architect or engineer and bear that architect's or engineer's signature and seal in accordance with the state's statutes and regulations governing the professional registration and certification of architects or engineers.

**108.2 Special professional services:** Where applications for unusual design or magnitude of construction are filed or where code reference standards in Appendix A require special architectural or engineering inspections, the code official is authorized to require full-time project representation by an architect or engineer. This project representative shall keep daily records and submit reports as required by the code official.

**108.2.1 Building permit requirement:** This special professional service requirement shall be determined prior to the issuance of the building permit and shall be a requisite for the permit issuance.

**108.2.2 Fees and costs:** All fees and costs related to the performance of special professional services shall be borne by the owner.

#### SECTION 109.0 DEPARTMENT OF BUILDING INSPECTION

**109.1 Code official:** The department of building inspection is hereby created and the executive official in charge thereof shall be known as the code official.

**109.2 Appointment:** The code official shall be appointed by the chief appointing authority of the jurisdiction; and the code official shall not be removed from office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.